

Docket No.: 20136-00344-US

(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: Vincent J. Mcgahay

Application No.: 09/849,530 --

For: METHOD FOR IMPROVING ADHESION TO

COPPER

Filed: May 7, 2001

Group Art Unit: 2823

Examiner: MALDONADO.

Box Non-Fee Amendment Commissioner for Patents

Washington, DC 20231

Dear Sir:

AMENDMENT

on-Fee Amendment
dissioner for Patents
ngton, DC 20231

ir:

In response to the Office Action dated December 4, 2002 (Paper No. 10), please amend the above-identified U.S. Patent application as follows:

REMARKS/ARGUMENTS

Claims 15-30 are now in the application. The indication that claims 18, 19 and 22-25 contain allowable subject matter is hereby noted.

Claims 15-17, 20, 21 and 26-29 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 6,153,523 to Van Ngo, et al. (hereinafter also Van Ngo) in view of U.S. Patent 5,420,069 to Joshi, et al. (hereinafter also Joshi). The cited references fail to render obvious the present invention. According, to the present invention, a layer(s) of copper germanide, germanium oxide and/or germanium nitride is provided on a surface of a copper member to improve the adhesion of another layer to the copper or copper alloy.

Van Ngo fails to suggest the present invention since, among other things, Van Ngo does not even remotely suggest improving a germanium layer for improving adhesion. The only